

# JOB OPPORTUNITY ANNOUNCEMENT

Human Resources Office  
United States Section  
INTERNATIONAL BOUNDARY AND WATER COMMISSION  
United States and Mexico  
The Commons, Building C, Suite 310  
4171 North Mesa Street  
El Paso, Texas 79902  
1-800-262-8857 ext. 4117 Or (915) 832-4117

NUMBER: **01-040**

ISSUE DATE: **09/10/01**

CLOSING DATE: **10/04/01**

Hand delivered applications must be received by the closing date (3:00 p.m. MST)

**POSITION:** Civil Engineer, GG-0810-07 Or 09 Or 11 Or 12

**LOCATION:** Engineering Department, Design Division, El Paso, TX

**POSITION POTENTIAL:** GG-12

**SUPERVISORY POSITION:** No

**FLSA:** Exempt

**BARGAINING UNIT:** Excluded

**DRUG TESTING:** No

**FULL TIME:** YES

**AREA OF CONSIDERATION:** U.S. Government-wide

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## Part I. GENERAL INFORMATION FOR POTENTIAL CANDIDATES

**Who May Apply:** [Eligibility] Applications will be accepted from current status United States Section, International Boundary and Water Commission (USIBWC) employees; status transfer eligibles from other federal agencies; reinstatement eligibles; veterans eligible for Veterans Readjustment Appointments (up to grade level GG-11); and disabled individuals eligible for excepted service appointments; accommodations will be made for qualified applicants or employees with disabilities, except when doing so would pose an undue hardship on the employing agency, (those needing reasonable accommodation for any part of the application and hiring process, should notify the Human Resources Office). Usually to have status, an individual must be currently employed in a permanent (career or career conditional) position, or have been employed in a permanent federal service position and be entitled to reinstatement. In addition, veterans who are preference eligibles or who have been separated from the armed forces under honorable conditions after three years or more of continuous active service may apply. All qualification, legal, and regulatory requirements must be met as of the closing date of this announcement.

**Application Information:** It is the applicant's responsibility to ensure the accuracy and completeness of the application. Incomplete applications or those not completed in accordance with applicable instructions will not be rated. Applicants will not be contacted to obtain further information, documentation, or required materials. The applicant MUST NOT submit letters of recommendation, training records, position descriptions, copies of awards, etc., unless they relate directly to the job for which applying. An individual concerned in examining an applicant for or appointing them in the competitive service may not receive or consider a recommendation of the applicant by a Senator or Representative, except as to the character or residence of the applicant. All material submitted in response to this Job Opportunity Announcement (JOA) will become part of the Promotion and Internal Placement Program files and will not be returned; therefore, be sure to make copies of your application material before submission. The USIBWC does not maintain an applicant supply file. Forms needed to apply for this JOA may be obtained from the Human Resources Office, any field office within the area of consideration and/or from the USIBWC website <http://www.ibwc.state.gov>. Applications must be submitted to the Human Resources Office at the address shown at the top of this JOA, and must be postmarked by the closing date. The use of government property or government franked envelopes to apply for a federal position is prohibited and subject to fines as prescribed by law.

**Potential of Position:** If the position is filled below the full performance level, the incumbent may be promoted without further competition until the full performance level is reached. Promotion is neither automatic nor guaranteed. Promotion will be based upon the supervisor's certification of the incumbent's demonstrated ability to perform the duties of the higher graded position in a fully successful manner, as well as the incumbent meeting all other requirements for promotion. If there are intervening situations affecting the classification of the position between the time of advertisement and the time that promotion(s) may be due, the advertised promotion potential is void.

**Evaluation to Determine Best Qualified:** The qualifications of each basically eligible candidate may be further evaluated to determine the degree that the candidate possesses the necessary knowledge, skills, abilities, and other characteristics needed to perform the duties of the position.

## Part II. VACANCY INFORMATION

**AGENCY BACKGROUND:** *The United States Section of the International Boundary and Water Commission (USIBWC), United States and Mexico, is an international agency categorized as an independent bilateral organization within the Executive Branch of the federal government. There are various field offices located along the boundary with the headquarters office in El Paso, Texas. USIBWC is responsible for providing environmentally-sensitive, timely and fiscally-responsible boundary and water services along the United States and Mexico border region while sustaining an atmosphere of binational cooperation and by being responsive to public concerns. (website <http://www.ibwc.state.gov>)*

**DUTIES:** The incumbent will be responsible for providing civil/hydraulic/structural engineering services for the direction and control of the planning, design, development, construction, alteration, inspection of buildings, grounds, facilities and the acquisition of equipment and services for the Design Division, Engineering Department, United States Section, International Boundary and Water Commission. Responsible for performing the design of and directs the development of the construction drawings and develops specifications for civil and/or structural engineering systems such as sewer mains, storm and sanitary sewer lines, sanitary lift stations, parking lot and road repaving, construction or structural rehabilitation of existing buildings, bridges, and support structures, earth retaining walls and slope stabilization, roofing systems, canals, levees, and other similar projects. Performs hydraulic engineering and hydrologic studies. This position requires the safe operation of a government motor vehicle. The work is usually performed in an office setting, with occasional travel to construction and Project sites.

### **QUALIFICATION REQUIREMENTS:**

<b><u>GRADE LEVEL</u></b>	<b><u>GENERAL EXPERIENCE</u></b>	<b><u>AND</u></b>	<b><u>SPECIALIZED EXPERIENCE</u></b>	<b><u>OR</u></b>	<b><u>EDUCATIONAL SUBSTITUTION PERMITTED</u></b>
* GG-7	None		1 year equivalent to at least GG-5 level		1 year of graduate-level education or superior academic achievement
* GG-9	None		1 year equivalent to at least GG-7 level		2 years of progressively higher level graduate education leading to a master's degree or master's or equivalent graduate degree
* GG-11	None		1 year equivalent to at least GG-9 level		3 years of progressively higher level graduate education leading to a Ph.D. degree or Ph.D. or equivalent doctoral degree
* GG-12	None		1 year equivalent to at least GG-11 level		None

**Applicants must submit a copy of their college transcript or a list of college courses that includes hours and grades.**

\* In addition to meeting the basic entry qualification requirements, applicants must have specialized experience and/or directly related education in the amounts shown in the table above.

### **Basic Requirements:**

- A. Degree: professional engineering. To be acceptable, the curriculum must: (1) be in a school of engineering with at least one curriculum accredited by the Accreditation Board for Engineering and Technology (ABET) as a professional engineering curriculum; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); and (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics; **Or**
- B. Combination of education and experience--college-level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering, and (2) a good understanding, both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such background must be demonstrated by one of the following:
  1. Professional registration--Current registration as a professional engineer by any State, the District of Columbia, Guam, or Puerto Rico. Absent other means of qualifying under this standard, those applicants who achieved such registration by means other than written test (e.g., State grandfather or eminence provisions) are eligible only for positions that are within or closely related to the specialty field of their registration. For example, an applicant who attains registration through a State Board's eminence provision as a manufacturing engineer typically would be rated eligible only for manufacturing engineering positions.

2. Written Test- Evidence of having successfully passed the Engineer-in-Training (EIT) examination, or the written test required for professional registration, which is administered by the Boards of Engineering Examiners in the various States, the District of Columbia, Guam, and Puerto Rico. Applicants who have passed the EIT examination and have completed all the requirements for either (a) a bachelor's degree in engineering technology (BET) from an accredited college of university that included 60 semester hours of courses in the physical, mathematical, and engineering sciences, or (b) a BET from a program accredited by the Accreditation Board for Engineering and Technology (ABET) may be rated eligible for certain engineering positions at GS-5. Eligibility is limited to positions that are within or closely related to the specialty field of the engineering technology program. Applicants for positions that involve highly technical research, development, or similar functions requiring an advanced level of competence in basic science must meet the basic requirements in paragraph A.

Because of the diversity in kind and quality of BET programs, graduates of other BET programs are required to complete at least 1 year of additional education or highly technical work experience of such nature as to provide reasonable assurance of the possession of the knowledge, skills, and abilities required for professional engineering competence. The adequacy of this background must be demonstrated by passing the EIT examination.

3. Specified academic courses--Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and in engineering that included the courses specified in the basic requirements. The courses must be fully acceptable toward meeting the requirements of a professional engineering curriculum as described in paragraph A.
4. Related curriculum--Successful completion of a curriculum leading to a bachelor's degree in engineering technology or in an appropriate professional field, e.g., physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance. Ordinarily there should be either an established plan of intensive training to develop professional engineering competence, or several years of prior professional engineering-type experience, e.g., in interdisciplinary positions. (The above examples of related curricula are not all-inclusive.)

**Specialized Experience:** Experience that equipped the applicant with the particular knowledge, skills, and abilities to perform successfully the duties of the position, and that is typically in or related to the work of the position to be filled. To be creditable, specialized experience must have been equivalent to at least the next lower grade level in the normal line of progression for the occupation in the organization.

**HOW TO APPLY:** To be considered for this position, applicants **MUST** respond to the evaluation factors listed below, as well as complete and submit all of the forms and documents as indicated. **INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED.** Forms may be obtained by calling 1-800-262-8857 ext. 4117 and/or at USIBWC website <http://www.ibwc.state.gov>.

**Evaluation Factors:** Each applicant for this position is **required** to respond to the elements listed below. On separate sheets of paper, **(A)** fully describe your experience in working with the element; **(B)** describe where and how you obtained your education, training, and/or experience in the element; and **(C)** describe the most complex issues with which you have dealt.

#### **Grade Levels 7 and 9:**

1. Knowledge of civil/structural engineering principles, concepts and methodology to carry out specific and limited work assignments or minor phases of broader projects related to the planning, design, construction, alteration, and inspection of agency buildings, grounds and facilities ranging from basic to moderately complex. Knowledge in applying basic formulas to routine calculations; preparing graphs, curves, and tables; and searching technical reports to obtain information.
2. Knowledge of basic hydraulic engineering principles, concepts, techniques, and methods to perform specific and limited work assignments involving hydraulic engineering studies as they relate to the design of conveyance systems and flood control and reservoir operations.
3. Knowledge of basic principles of fluid mechanics/hydraulics and operational water requirements with respect to systems and facilities for the development, conservation, utilization, and control of water resources.
4. Knowledge of computer applications relating to hydraulic engineering study and design tasks.
5. Skill in interpersonal communications in order to interact with a variety of individuals within and outside an agency.

#### **Grade Levels 11 and 12:**

1. Professional knowledge of hydraulic engineering concepts, theories, methods and techniques relevant to the conduct hydraulic engineering and hydrologic studies as they pertain to floods, flood control, and reservoir operations. Supplementary professional knowledge of hydraulic engineering and economic principles applicable to the design of conveyance systems ranging from basic to moderately complex.

2. Knowledge of computer applications pertaining to hydraulic engineering study and design tasks, including the running and evaluation of computer generated mathematical modes and profiles for surface waters. Requisite skill in developing computer programs that supplement established programs to meet specific data processing needs and/or to graphically portray data.
3. Knowledge of the hydraulic engineering concepts, theories, methods, and techniques relevant to the conduct of groundwater studies to include such things as complex, 3-dimensional finite-difference groundwater computer models.
4. Professional knowledge of civil/structural engineering concepts, principles, and practices applicable to the full range of duties concerned with design, layout, and construction of facilities and structures such as industrial type shops, residences, canals, dams, and other facilities.
5. Knowledge of laws and regulations controlling government contracting for A-E services, supplies, materials, equipment, and construction, as well as the contractor selection process. Knowledge of product evaluation and ability to ascertain if contractor offerings meet product expectations.
6. Skill in interpersonal communications in order to interact with a variety of individuals within and outside an agency.

**Item 1. Forms/Documents for all Applicants:**

- 1) Standard Form 171, Application for Federal Employment; OR Optional Form 612, Optional Application for Federal Employment; Or any other format such as a resume with the specific information required by Optional Form 510, Applying for a Federal Job;
- 2) IBWC Form 336, Ability to Drive Safely; AND
- 3) Optional Form 306, Declaration for Federal Employment.

**Item 2. Promotion, Reassignment, Reinstatement, and Transfer Eligibles: (in addition to submitting all required forms/documents in Item 1.)**

- 1) Copy of Standard Form 50, Notice of Personnel Action, **which reflects** eligibility (status); and
- 2) Copy of most recent performance rating/evaluation. (Applicants unable to provide their most recent performance appraisal must provide written justification for its absence)

**Item 3. Veteran Eligibles: (in addition to submitting all required forms/documents in Item 1.)**

- 1) Form DD-214, Proof of active military service, dates of service, and condition of discharge; and
- 2) If applicable, Standard Form 15, Application for 10-point Veteran Preference with required documentation.

**Item 4. Disability Eligibles: (in addition to submitting all required forms/documents in Item 1.)**

- 1) Certification from the appropriate State Vocational Rehabilitation Agency that he/she has the ability to perform the position duties, are physically qualified to do the work without risk to themselves or others, and are competent to maintain themselves in a work environment.
- 2) Veterans who are qualified for the positions must have retired from active military service with a disability rating of 30 percent or more, or be rated by the Department of Veterans Affairs within the last year as having a compensable service - connected disability of 30 percent or more.

**As a Condition of Employment: (All Applicants)**

- 1) Salary payments will be made by Electronic Funds Transfer (EFT), know as Direct Deposit;
- 2) An Official College Transcript (must be submitted within 30 days after selection);
- 3) Relocation expenses **WILL NOT** be paid by the U.S. Section; **And**
- 4) All candidates must possess a valid state driver's license; must have a good driving record; and must meet the requirements for the issuance of a Government operator's license. **Driving records will be checked.**

NOTE: An individual who does not or cannot meet a condition of employment will be subject to removal from the position and employment with the USIBWC.